UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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CERTIFIED MAIL: RETURN RECEIPT REQUESTED ( )

Mr. Michael J. Riordan, P.E.
Acting Director
Department of Municipal Development
One Civic Plaza, Room 7057
P. O. Box 1293
Albuquerque, NM 87103

Dear Mr. Riordan:

Attached you will find the Municipal Separate Storm Sewer System (MS4) Audit report that was conducted August 22 – 24, 2009, by the Environmental Protection Agency, Region 6 Stormwater Team.

If you have any questions, please do not hesitate to contact Ms. Diana McDonald, of my staff, at (214) 665-7495.

Sincerely,

Michael Michaud
Associate Director
Water Enforcement Branch (6EN-W)

Enclosure

cc: Roland Penttila
Manager, Stormwater Management Section
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NMS000101 MS4 AUDIT
CITY OF ABLUQUERQUE (COA) (only)
September 22 – 24, 2009
Administered by the Storm Drainage of the Department of Municipal Development (DMD)

I. STORM WATER MANAGEMENT PROGRAM (SWMP):

A. Structural Controls and Storm Water Collection System Operation

SWMP - Consists of underground storm sewers and inlets, lined and unlined open channels, natural arroyos, pump stations, detention basins and flood control dams. COA maintains controls not belonging to AMAFCA. Although this Best Management Practice (BMP) is discussed in the SWMP, it is described in more detail in the DPM. Inspections are on-going but no less than annually. Maintenance activities are generally assigned based on results of field inspections of existing systems, especially prior to primary rainy season (June through September). New constructed systems are accepted into agency maintenance only after inspections have been completed to assure they were built to agency regulations. Inspections are also conducted after every major rain event and in response to customer concerns. Floatable accumulations in open channels are periodically removed during normal maintenance activities and disposed of through COA Solid Waste Disposal Programs. Structural controls are inlet grates, pump station bar screens, outlet structure control mechanisms for detention basins and flood control dams, and special water quality control structures. Accumulations are removed on an as needed basis and when scheduled maintenance is conducted. Minor detention basins are normally associated with homeowners associations and are not routinely inspected by COA. However, they are inspected as problems occur or there is a complaint received from the public.

Findings - COA coordinates with its other co-permittees, the New Mexico Environment Department (NMED), and various federal agencies. COA has 115 ponds including 11 dams. The Senior Engineer regularly inspects the dams and small ponds. While on site, he will note any trash problems. These ponds and dams are inspected and cleaned out on a regular scheduled basis (usually twice a year) by DMD Maintenance. The controls were initially installed to control flood waters. There is an emergency response program (written) through which the Water Utilities Authority (WUA) agreed to inspect the 14 lift stations prior to the rainy season. They also check for floatables. Maintenance is tracked though work orders. Most complaints come to DMD through the 311 complaint system and the majority of those are for mosquito control. COA contracts with Southwest Sewer to clean entire system on a regular basis. They clean wet wells and pumps stations. The DMD maintains paper files of all maintenance done by COA crews.

Records of trash and sediments removed are kept. Water quality monitoring is used to validate Water Quality. COA is working with the US Geological Service (USGS) to validate the quality of data not collected by the GS. Historical records of floatables are

used to identify source of trash. Although there are no routine inspections of ponds performed by Engineering, they do check the structures after rainfall events.

All structure control maintenance records are maintained in the GIS system and are reported in the annual report. Paper files are also maintained. They monitor joint-use facilities (COA and AMAFCA). If they notice trash content is out of the ordinary, they investigate.

B. Areas of New Development and Significant Redevelopment.

SWMP – The Capital Improvement Program (CIP) has historically addressed adequacy of existing facilities, capacity of existing facilities to accommodate future land use conditions, and provide adequate flood protection for the 100-year flood storm. Many of the Master Plan Studies included sediment transport and sediment reduction to the Rio Grande, and the arroyos and channels. Consideration of sediment load has resulted in a wide variety of detention basins throughout the system. COA is involved in a Development Review Process which reviews and approves site drainage plans for all developments. This process includes development and drainage review for all private developments by a Development Review Board (DRB); a plan review for all public and private development conducted by the Design Review Committee (DRC) including new drainage system projects; drainage plan review and approval by the Drainage Review Section of the Planning Department, which include a Storm Water Pollution Prevention Plan (SWPPP); on-site inspections for installation of new facilities by PWD Construction Division, Drainage Development Section of the Planning Department and the DMD Storm Drainage Division; and, an erosion and sediment control on-site inspection provided by both the PWD and the Environmental Health Department (EHD), through provisions of the Site Disturbance Permit, which require site restoration to prevent erosion after development projects are complete. Reviews are in accordance with the Development Process Manual (DPM) which is to be used as a reference delineating the development process from initial land use proposals, through infrastructure construction, to completion of a proposed development.

Findings – DMD coordinates with the Planning Division, AMAFCA as part of the Design Review Committee, NM Department of Transportation (DOT) for projects located adjacent to the DOT's right-of-ways. There is an issue with structural controls in new and re-development areas. City Planners do inspections under the Development Code, but these are not stormwater inspections per se. Citizen complaints are received through and logged into the 311 system. There is no way to segregate the stormwater related calls. DMD also receives stormwater complaints. There is no mechanism to enforce against non-compliant operators. There is no ordinance in place at this time. COA does notify identified non-complying operators of their responsibility to comply with stormwater regulations. All records for new development and re-development are located with the Planning Department at Plaza del Sol. There is a retention schedule but some records may be retained for the life of the facility. COA stated that the program has minimized the amount of dirt and contaminants attached to dirt. Ponds have interceptors

that have helped with floatables. Dumpster design change minimized dumpster juice which helped with bacteria loading.

COA isn't sure how to quantify whether or not structural controls are effective in these areas. There is an issue with the Homeowners Associations. It is unclear who is supposed to maintain ponds. COA doesn't keep management records at private ponds. Also, the DPM dictates maximum amount of loading will be allowed but the burden of proving they aren't exceeding limits is up to the developer.

COA does not administer the Notice of Intent (NOI) program. The Planning Department sends out letters approving each project (after review) and notifies a NOI must be submitted and operator must have a SWPPP. The Planning Department also makes sure projects (basins) are put in correctly. COA feels the DPM is the control mechanism versus an ordinance. There is a financial guarantee and agreement and a punch list that the developer hands to the COA. That punch list is the quality control. The developer has to do any cleanup before the COA will accept. There is no good way to measure effectiveness. COA does not differentiate from new development / redevelopment. They don't believe either is a significant contributor of pollutants. Newer development is taken into consideration when evaluating Water Quality.

C. Roadways.

SWMP –The Public Works Department (PWD) Street Maintenance Division operates a de-icing program for the winter season. SWMP states they use a rock salt and cinder rock mixture. They have four street maintenance yards where covered storage is provided for all winter de-icing material. The COA's eleven street sweeper units sweep residential and arterial streets a minimum of three times a year, with any bike lane streets being swept an additional two times a year. Because The Downtown and Old Town areas are high trash producers and high visibility areas, they are swept once a week. Areas adjacent to major concrete and asphalt production areas are swept once every two weeks. The Downtown Action Team, a privately funded business organization, operates a cadre of manual street cleaners and a mini-street sweeper which operate daily in the immediate downtown area surrounding City Hall. This group also provides security in the downtown area. The Weed and Litter Division of the Street Department provide maintenance for the Right-of-Ways (ROWs) in COA. This includes mowing roadside vegetation and removal of inadvertent dumping in areas along the ROWs. Maintenance is performed on an as-needed basis and is mostly dependent on the amount of rainfall received annually. The Department has licensed applicators who apply herbicides such as Roundup or Rodeo, depending on area.

Findings - The DMD coordinates with the Street Maintenance Division on street maintenance and road repair activities. They also coordinate with the Public Works Department (PWD, NMDOT, University of New Mexico, Bernalillo County, the Middle Rio Grande Council of Governments, and the Metropolitan Planning Organization (MPO). All requests for state and federal funding on roadways must go through the Middle Rio Grande COG. Maintenance records are maintained by the Maintenance

Department. The Streets Department keeps records of what they put down in the way of de-icing materials. They normally use volcanic rock and a little bit of salt. There are different protocols for different events. COA doesn't think there is a need to sweep up the cinders (volcanic ash) which are not a Water Quality issue. Roadways are inspected on a three-year basis. All roads are rated based on these inspections and repair resources are determined by these ratings. Citizen complaints are mostly about roadway dumping. Complaints are called into the 311 system or received directly by the DMD. Street maintenance would receive litter complaints. Major spills are handled by the Fire Department; minor spills are handled by Street Maintenance. First responders will call the Department of Environmental Health who in turn will call the COA Stormwater Coordinator. The Planning Department maps developer-created street improvements, while capital improvements are mapped by the DMD. Both entries go into the same GIS system. There has been little success in measuring and characterizing the makeup of pollutants picked up in street sweeping. Data gathering from other departments involved with the streets is haphazard at best.

D. Flood Control Projects.

SWMP – Flood control facilities are generally channel improvements and major detention basins and flood control dams. These facilities are generally constructed as part of CIPs for design and construction of new facilities. Detention basins and detention dams act as sediment and debris traps for downstream systems and receiving streams. These are generally designed with grates on the outlet structure to control debris accumulation in downstream systems. Water quality controls have been included on existing infrastructure to enhance storm runoff quality. Modifications of existing dam outlet structures prohibit passage of floatables and trash racks increase effectiveness of floatables removal. Use of a 2004 study to evaluate sources and BMP alternatives to control gross pollutants, including floatables used to prioritize target areas for gross pollutant control BMPs and to target areas of concern for public education.

Findings – All co-permittees have flood control projects. Buried in any transportation project is flood control. The whole COA system is a flood control project. Dam inspection program is run by the DMD for 11 of the 115 ponds but is dictated by the State Engineer's Office. DMD conducts an inspection at one major site and one minor site per year. The State Engineer defines major and minor. The DMD will inspect all 11 dams but will report on only the four designated by the State Engineer. Inspection program for 115 ponds are overseen by the Maintenance Department. Street Maintenance prioritizes and inspects ponds prior to the rainy season (July through September) to make sure they will be able to receive expected rainfalls. After the rainy season there is no set schedule for maintenance. There are no mechanical devices to control outflow. The 14 pumps stations are under contract for maintenance. Records are kept on how much is pumped and maintenance is tracked via work orders. All records are paper records and are kept by the WUA. There is no way to effectively measure or determine the effectiveness of this BMP. Ponds were built for flood control, but it is a bonus if they collect floatables. If flood controls are built the extra money is spent to add

Water Quality features based on historical observations of effectiveness at reducing gross pollutants and continued function.

E. Pesticide, Herbicide, and Fertilizer Application.

SWMP – The conversation of drinking water from ground water to surface water from the Rio Grande River has re-emphasized the need for COA to control the amount of herbicides, pesticides and fertilizers entering the Rio Grand River. The Water Conservation Office of the COA Water Utility Department (WUD) has taken the lead role in promoting not only landscape based water conservation, but also the prudent use of landscape based pesticides, herbicides, and fertilizers (PHFs).

The COA EHD operates a Household Hazardous Waste Program for collection and disposal of household hazardous waste, which includes pesticides, herbicides and fertilizers. This program is supported by a monthly surcharge on refuse collections bills.

The following is a summary of the COA departments that utilize PHF:

1. Parks and Recreation Department, Maintenance Division, uses non-restricted pesticides and herbicides in limited quantities for pest and vegetation control. Applicators are trained and licensed by the New Mexico Department of Agriculture (NMDA). City-wide water conservation efforts have reduced the amount of turf areas with the utilization of xeriscape planting and landscape materials.

2. The Weed and Litter Division, utilizes herbicides on a limited basis for partial vegetation control. All applicators are trained and licensed by NMDA.

3. The COA Environmental Health Department (EHD) operates a Bio-Disease Management Program that utilizes various insecticides at various times of the year for control of mosquitoes in residential and agricultural areas. Applicators are licensed by the NMDA. The department also utilizes gambusia minnows for mosquito larvae control in riparian areas.

4. The Water Conservation Office of the COA WUD developed and implemented a successful xeriscape program that encourages conservation of irrigated turf areas to native xeriscape. The program includes rebates for both residential and commercial areas that convert to xeriscape. The WUD published brochures emphasizing correct use of fertilizers in landscape installations. COA Planning Department implemented guidelines that limit the percent of irrigated turf area permitted in new development.

Findings – COA has moved toward water conservation and more and more people use xeriscaping, thus reducing the use of PFHs. The DMD SW Division does not keep records of other departments' PFH use. Staff was unable to provide any information except that pesticides monitoring has always shown below detections.

F. Illicit Discharges and Improper Disposal.

SWMP – The SWMP states that enforcement of applicable ordinances is provided by several COA Departments including the WUD, Water and Wastewater Utility Division, Code Enforcement Division of the Planning Department, the Albuquerque Fire Department, and the COA EHD. It further states enforcement is carried out on all portions of the storm drainage system, including the COA maintained system, by the various departments. There is a 24-hour hotline for citizen's to call if they observe storm water pollution problems or have a complaint. The Wastewater Division operates a program for permitting and controlling discharge of industrial wastewater. The Industrial Wastewater Inspection Division enforces the discharges of waste and/or waste water to sanitary sewers. They also provide industries and commercial businesses with information and assistance in waste minimization, reducing the amount of potential illicit and illegal dumping. Hazardous waste materials are controlled by the EHD and the Fire Marshall's Office. The Fire Department operates a hazardous materials response team which has ongoing training. The team is fully equipped to respond to accidental or intentional discharges of all hazardous type materials. The SWMP lists allowable non-storm water discharges, including but not limited to, landscape irrigation, foundation drains, footing drains, lawn watering, etc. All businesses in the Albuquerque area have been entered into a database (GIS). The SWMP states the Storm Drainage Division will utilize the database for tracking essential information on industries for the SWMP. However, it does not state what is "essential information". The SWMP states in Section 2.3.2 that the COA will conduct visual monitoring of permitted industries and will concentrate on monitoring industries for NPDES Storm Water Discharge Permit Compliance on a continuing basis, in accordance with the guidelines of the multi-sector general permit.

Findings – The COA works with the AMAFCA because AMAFCA walks the channels and will alert COA to any illicit discharges. COA coordinates with the County, NMED, Environmental Health Department and the Fire Department on complaints. Sometimes these departments will handle the discharges themselves, sometimes they will contact DMD. If there are any problems with sanitary systems (i.e., a line break), the WUA will respond. COA does dry weather inspections at 17 outfalls (mostly industrial areas), which they report in their annual reports. The North Diversion channel has been problematic so they do more inspections there. They rely heavily on the 311 system. No wet weather screening is conducted. They have never gotten a hit on illicit discharges. They have completed one walk-through screening of all outfalls and do monitoring at five of those outfalls. DMD knows where their various industries are and their potential discharge potential. Quite a few are located along arroyos along the North Diversion channel. They do not know the specific number of industries but they haven't separated them into industrial categories. If they ever found any illicit discharges, they would track back to the source. However, they have never found any at their 17 outfalls. They have worked with AMAFCA on reported industries. Monitoring data is reported to EPA via DMRs. DMD does not summarize monitoring data nor do they analyze their own data. But they indicated their SWMP discusses how they would eliminate pollutants. They were supposed to submit loading data in year four of their permit. However, they failed

to submit the data. The USGS is currently shifting through all collected data to determine monitoring results.

G. Sanitary Sewers

SWMP – In 1976 COA Wastewater Utility Division performed a massive infiltration/inflow study and found I/I was not a significant problem. In 1999, a newer study of older areas in of the Albuquerque East Valley Area, which encompasses low lying areas east of the Rio Grande from the north city limits to the south city limits. These studies resulted in maps for final input into the COA GIS and determined locations and extent of any possible cross-connections found. Since there was a small amount of suspected cross connections, there were no furthering dye testing, smoke or TV inspections. The COA has an annual program to rehab existing sanitary sewer system manholes and lines. The COA PWD Standard Specification includes specifications for specific pipe material and size for sanitary sewer construction.

Findings - The Water Utility Authority (WUA) manages sanitary sewers. This section of the SWMP will have to be re-written. Any calls received by DMD regarding infiltration of sanitary sewer seepage is referred to the WUA. COA seldom has problems with privately owned sewer lines but if they do they will report to WUA who investigates by conducting smoke tests. WUA will contact COA if they are responsible and COA will resolve. Seepage would show up as a smell and would be handled appropriately, either by the Sewer Maintenance Department or by the landowner. WUA has procedures where they will provide a map to plumbers indicating the depth of sewer lines and the size of the lines. The 311 database is used where issues of this type are tagged as "unusual". They have had only one in the last five years.

H. Spill Prevention and Response –

SWMP – The COA Fire Department is the primary response agency for spills of toxic material with two response teams – one in the northeast section of the city, the other in the southwest area of the city. They are concerned with containment, control and clean up of hazardous material spills. They have approximately 100 personnel involved in the program with approximately 50 certified by the State ads Level 3 qualified. The remainder varies in training from OSH technician rating to OSHA specialist rating. The COA EHD provides assistance in spill control. They provide assistance to industries and commercial businesses on proper storage and handling of hazardous materials. They also coordinate clean up effort with the COA Fire Department and other fire response agencies servicing the overall area. The PWD also provides assistance and support. They have an on-call contractor for collection and disposal of material spills, particularly petroleum type materials. The NMED also provides response with follow-up enforcement if necessary.

Findings - The Hazmat Team with the Fire Department is call for all spills of toxic materials. There is one team in the northeast area of the COA and one in the southwest area. These teams will respond to every spill because they assume everything

is toxic until they determine otherwise. If there is an oil spill they will go out and put down a soak-up material and then call the Street Department. The EHD is called by the Fire Department. They will sometimes call the Health Department and the Maintenance Department will be called if more assistance is required. DMD SW is only called as a courtesy but not routinely does any agency report them any spills or leaks that happen in the COA. They don't keep track of data related to spills or leaks. There is no training done by the DMD SW. Other agencies have their own training. "Reportable spill" is not defined in the SWMP. They have had only one (at the airport) to into a pipe. Sampling was done to make sure that it did not reach waters of the US or other sensitive areas. Other than sampling at the outfall, there is no other mechanism in place to evaluate adverse effects to human health and the environment. They feel they have a failsafe in the AMAFCA processes.

I. Industrial & High Risk Runoff –

SWMP – The SWMP contained a list of the facilities that may need an Industrial NOI. The list indicated companies that specialize in particular types of hazardous waste products. There are no hazardous waste treatment or hazardous waste disposal sites within the municipal limits. The Fire Department inspects facilities that deal with hazardous mat3erials and facilities subject to Section 313 of SARA Title III. The Uniform fire Code, the regulatory authority for any business utilizing hazardous type materials, was adopted in 1991. This Code is more restrictive than those in Section 313 of SARA Title III. Industries are tracked in the GIS system. All new industries must apply to the Fire Marshall for permit coverage prior to issuance of a building permit. The Inspections are conducted by the Fire Department but there is no prioritization. Inspections being performed at facilities referred either by citizen complaints or by referral by other agencies. These are not stormwater inspections, however.

Findings - The MS4 does not have landfills or other industrial facilities. They have an airport and two transportation yards, one maintenance facility, and one solid waste facility. There is a SWPPP on each location, which is updated as needed. There are no Type II facilities. The MS4 does not inspect its own facilities. That is left up to the individual facilities. The DMD SW does not know if they are in compliance or not.

J. Construction Site Runoff –

SWMP – The COA, in conjunction with its co-permittees, developed the DPM (the NPDES guide) which is used as a standard tool for all construction. It outlines building standards, BMPs, guidance in preparing a SWPPP, Notices of Intent and Termination and the use of electric processing. They also prepared a field BMP guidebook for field inspectors which are available in hard copy, on the COA website and on CD. Plans for control of erosion and sediment, and site discharge are reviewed and approved through normal plan r4eview process. Approved plans become part of the construction plan set for future onsite inspections during construction. The COA Planning Department notifies, in writing, operators with approved grading and drainage plans exceeding one acre in size. The Planning Department also provides written

notification to applicant of the need to prepare a SWPPP and the need to conform to the EPA NOI process before construction activities begin. All construction contracts funded by COA include a pay item and requirements for preparation and implementation of SWPPPs for the project. Inspections provided by:

1. COA Construction, Storm Water, or Code Enforcement Divisions,
2. Spot check site inspections conducted by COA SW Division, AMAFCA and NMED,
3. Storm Water Division maintain NOIs for Department of Development construction projects and assists contractors in developing SWPPPs.
4. Additional inspections conducted by cooperation between COA PWD, Planning Department, AMAFCA and the DMD,
5. Telephone hot-line currently operating for citizen complaints.

Training program certification was required in the SWMP, but the training program was not described. Fugitive dust training was done with a cursory one hour class. The training was reported in Appendix B of the 2004 annual report.

Findings - There is coordination between the DMD SW, the Planning Department, and CIP Department with Construction Services, the NMED, and AMAFCA on projects they do together, and with Dot on projects they do together. There are regular pre-construction meetings with all agencies involved with individual projects. DMD SW attends these pre-con meetings for public projects, but they don't get involved with private projects. They only get involved with private projects if there is a citizen's complaint or Planning inspectors have a problem. For municipal owned projects there are inspectors (not dedicated) from the Construction Services Division inspectors, who have been trained to look for stormwater issues. They look for the basics. They don't document what they find. Private construction inspections are done by the Planning Division. The construction inspectors at municipal-owned sites make sure the operators have SWPPPS AND BMPS. Also, DMD SW does training of inspectors and training of contractors. They also do fugitive dust training. There are specific guidelines and specs required when contractors bid for contracts. On non-municipal owned projects, the Planning Department notifies operators of the need for NOIs and SWPPPs. For infrastructure installation, PD checks for dust controls. For grading and drainage plans there has to be an Erosion and Sediment Control Plan per development process (per the DPM). Contractors also have to have fugitive dust permit before beginning. Inspectors try to work directly with contractors. For continued problems, inspectors will report to DMD SW. There is no enforcement program other that the fugitive dust program. The pollutants of concern identified are sediment and floatables, possibly metals if touched by sediment particles, oil and grease. A study conducted by the Fugitive Dust Department showed that silt fence control blowing dust, so it is a requirement of the Fire Department permit. If there is a detention pond on site, no wattles are requirements due to a flood issuing. DMD SW is working with consultants to let them know the MS4 does not want stormwat4er inlet protections installed. COA is still in the process of looking at collected data to see if sediment has dropped over time. AMAFCA has traditionally kept track of what they took out of the channel. Amount is dependent on rainfall amounts and better

technology. **However, COA has no data.** There were training events in 2005 and 2008 with approximately 100 attendees at both training events. Between Construction Services, Planning, and Environmental Health, there are approximately 100 inspectors. However, none of them are dedicated storm water inspectors. The USDA provided training on the Revised Universal Soil Loss Equation (RUSLE). They have pocketbook guides and the big NPDES manual. There has been no training in 2009. Construction operators are contractually obligated to comply with all state and federal law. There is a financial guarantee for all private sites. That guarantee is not released until the last contractor has left and the COA has accepted the ingrastructu3e. There is a hold of final payment on the public sites. COA can shut down projects from pubic a public nuisance standpoint and withhold payment but they have never used that option for stormwater. They have used it for fugitive dust. COA feels there is a higher level of standardization, better cooperation, greater compliance and higher level product as a result of their education and compliance assistance programs. Inspections are discussed in the DPM, but only address inspections as a requirement of the Construction General Permit. The DPM does address who within the MS4 should conduct inspections, but does not address enforcement measures. COA has a list of construction projects with the owner's name, address, and type of construction, one atlas page, and contact information. This information is updated at least six times a year and is entered into database. The database is used in the event a complaint is received, at which time they would research the contact information. Every site is tracked regardless of size. However, there is no way to determine the size of the site. All sites requiring drainage plan are included in the database. The EPA eNOI database is cross checked bi-monthly to see who has submitted a NOI. The Management Guidelines Manual referred to in the SWMP describes a program to implement and maintain structural and non-structural BMPs. In order to get a building permit, an operator must submit a grading plan, contractor license, and pay their fee. There is no requirement in the SWMP for operators to obtain a NPDES permit. Inspections are only conducted by DMD SW is there is a citizen complaint. For public sites, there is a construction site inspector on site at least once per day. These inspectors will note any stormwater issues. DMD-CSD keeps diary and day sheets. Parks Design and Construction keeps their own records, diary and day sheets. On the private side, consultants keep day sheets. The COA inspectors do not usually inspect private sites but will contact DMD SW if they notice track out from the site. There has been no periodic review of procedures.

There is an informal enforcement process. On public sites, inspectors can issue a stop work order. On private sites, when the COA brings a non-compliance issue to the sit4e contractor's attention, the contractor fixes it. There are no follow-up inspections to verify compliance. There is no ordinance in place for enforcement escalation. The COA does have an administrative code as allowed by the permit.

K. Public Education / Involvement–

SWMP – As discussed in the SWMP, the COA conducted various programs to improve the public's knowledge of stormwater and problems associated with stormwater pollution. Those included Pony Panel comme4rcial advertising billboards, bus panel

advertising on public transportation transit buses, pencils, flyers, Frisbees, and magnets for hand out at special events, demonstration computer game know as ECO-MASTERS, a computerized tour of an urban area identifying common pollution problems, public educational brochures, letter mail out to specific industries and businesses exhibiting potential for stormwater pollution. They take part in many events including Albuquerque Children's Festival, and Albuquerque City Employee Day. COA has participated in the education of construction association members. They developed a 24-hour Stormwater Hotline to aid citizens in reporting incidences of illegal dumping or illicit discharges to the storm drainage system. The local pubic access TV channel has been used to show taped informational videos. They have utilized the Youth Development, Inc Program to mark stormwater drainage inlets. The SWMP does not discuss public involvement, only education.

Findings – COA is currently not measuring performance in this BMP. They have established a website. Their budget includes money to provide outreach with their co-permittees. DMD SW thinks a survey would be a good thing. They have noticed more bag stations for pet waste installed after outreach project. They have the 24-hour stormwater hotline in addition to the 311 system. They have conducted the inlet marking project and hung door hangers both of which have information and a phone number to report illicit discharges and any other concerns. They have developed magnetic door plaques, brochures, wheels, Kooney Watson videos. They have seen greater volunteerism. The failure of the system is that there are not enough people to respond to complaints. City is a minority city. Storm drain markers are in Spanish and English. They don't print brochures in Spanish because the majority of the Hispanic community cannot read Spanish.

L. Monitoring Programs.

1. The Dry Weather / Wet Weather Screening Program –

SWMP - According to the November 28, 2004, SWMP, dry weather field screening was performed for the entire storm drainage system as part of the original NPDES Storm Water Permit application. Since that time, system screening has been accomplished based on complaints and/or as part of normal field inspection for improvements or maintenance. The permit requires dry weather screening of entire MS4 once per year and for wet weather screening, the permit requires all major outfalls discharging directly to the Rio Grande be screened at least once per year. In a letter dated November 30, 2004, COA informed EPA that they were combining dry and wet weather screening due to arid conditions and sporadic rainfall events. The letter further states they will monitor 17 major screening points (and list the locations) and states that these monitoring points will be screened at least once a year and sampled at least once every other year.

Findings: Dry and wet weather screening are done at 17 locations annually and is reported in the annual report. Other monitoring is done by the USGS based on the schedule in the permit – wet season (6/1-9/30) and dry season (10/1-5/30.

USGS is the contractor because it is a shared expense and they give a discount. The COA stated results of the monitoring program has shown no discharge of pollutants into the MS4 from runoff associated with industrial activities.

2. Industrial and High Risk Runoff Monitoring –

SWMP - The SWMP states there are no hazardous waste treatment or hazardous waste disposal sites within the municipal limits of COA. The Albuquerque Fire Department is primary agency responsible for inspecting facilities that deal with hazardous materials and facilities subject to Section 313 of SARA TITLE III. The Fire Department provides site inspections and Fire Code certifications to facilities described in 40CFR122.26(d)(2)(IV)(C). All businesses are subject to these inspections and certifications. Inspections are conducted based on citizen complaints, business complaints, or other agencies. Monitoring of permitted industries are visual only as part of the inspection program by the fire prevention bureau for compliance with the Uniform Fire Code. The COA will concentrate inspections on industries identified as pollution problems.

Findings – There are no hazardous waste treatment or hazardous waste disposal sites. The Fire Department does visual inspections where there is a problem reported, either by citizens, other industries, or other agencies.

II. Summary

It was apparent during the audit that while the Storm Drainage Design, Engineering Division of the Department of Municipal Development (DMD) is doing what they can to run this program, they are constrained by lack of cooperation by other departments, lack of access to data maintained by other departments, and lack of adequate personnel. There is one full time stormwater quality engineer, and one staff position dedicated 75% of the time. In addition to running the program, these two staff members conduct inspections and perform compliance assistance. There is no enforcement escalation program. There is no ordinance to implement the Stormwater Management Program (SWMP) and other permit conditions. However, the COA uses administrative code as allowed by the permit. During the audit, the team was informed that an ordinance has been drafted and will be proposed in the near future, but currently there isn't one. There are no dedicated stormwater inspectors. For a city as large as Albuquerque there should be routine inspections of sites other than city owned projects but there is not enough manpower to perform these inspections. There appears to be no routine monitoring of industries. The Albuquerque Fire Department only does visual inspections as part of the Fire Prevention Inspection Program. There should be less dependence on the AMAFCA to reduce pollutants in the channels and more concentration keeping pollutants out of the city's system. The COA does not know how to quantify or measure compliance or non-compliance within their MS4 jurisdiction. There is no evidence that the public was ever afforded the opportunity to review or participate in the core items of the permit and the SWMP. There is no evidence that the Pueblos of Isleta and Sandia were ever given copies of the annual reports although COA

indicated they had forwarded them. While the AMAFCA is a co-permittee, the COA has relied on their control measures to prevent pollutant discharges to the Rio Grande. In your four of the permit (2007) COA was suppose to report seasonal loading data and event mean concentrations. However, they failed to do so. USGS is currently reviewing their data. Also, toxicity testing in year five of the permit was not conducted in accordance with the permit.